

## CLAIMS

What is claimed is:

1. A method for allowing debugging capability in code instrumentation that takes a block of original code to produce a block of instrumented code, comprising the steps of:
- providing an instrumentation breakpoint in the block of original code;
  - generating the block of instrumented code when the instrumentation breakpoint is reached;
  - running the block of instrumented code until a debugging breakpoint is reached, and
  - performing debugging functions on the block of instrumented code at the invoked debugging breakpoint.
2. The method of claim 1 wherein the step of providing comprises the step of replacing a first instruction in the block of original code by the instrumentation breakpoint.
3. The method of claim 2 wherein the first instruction comprises one or more instructions.
4. The method of claim 2 wherein the step of generating comprises the step of restoring the first instruction to the block of instrumented code.

5. The method of claim 1 wherein the step of providing comprises the step of providing a debugging breakpoint in either the block of original code or the block of instrumented code.

6. A computer-readable medium embodying instructions that cause a computer to perform a method for allowing debugging capability in code instrumentation that takes a block of original code to produce a block of instrumented code, the method comprising the steps of:

providing an instrumentation breakpoint in the block of original code;

generating the block of instrumented code when the instrumentation breakpoint is reached;

running the block of instrumented code until a debugging breakpoint is reached, and

performing debugging functions on the block of instrumented code at the invoked debugging breakpoint.

7. The computer-readable medium of claim 6 wherein the step of providing comprises the step of replacing a first instruction in the block of original code by the instrumentation breakpoint.

8. The computer-readable medium of claim 7 wherein the first instruction comprises one or more instructions.

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9. The computer-readable medium of claim 7 wherein the step of generating comprises the step of restoring the first instruction to the block of instrumented code.

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10. The computer-readable medium of claim 6 wherein the step of providing comprises the step of providing a debugging breakpoint in either the block of original code or the block of instrumented code.

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